NOTES.

THE Bakerian Lecture will be delivered before the Royal Society on Thursday, May 9. The research upon which the lecture is to be based has been conducted by Messrs. A. Vernon Harcourt and William Esson, and the title is announced as "The Laws of Connection between the Conditions of a Chemical Change and its Amount."

AN abstract of the paper in which M. Berthelot describes his investigations of chemical combinations with argon, will be found in our report of the meeting of the Paris Academy of Sciences (p. 527).

PROF. ADOLPHE CARNOT has been elected into the Paris Academy of Sciences, in the place of the late M. de Lesseps.

THE late Mr. William Bolitho, of Gulval, Cornwall, has bequeathed £500 to the Geological Society of Cornwall, the income of which sum is to be applied each year in "the production of a gold or richly-gilded silver medal, to be presented to the member of the Society whose attainments, labours, or discoveries in geological or mineralogical science are found most deserving." He has also left a like sum for the Penzance Library.

THE death is announced of Mr. E. Turner, Chairman of the Council of the Sanitary Institute.

WE also notice the death of Dr. E. D. F. Meissel, at the age of sixty-nine. He made a number of important contributions to mathematical astronomy, and his tables of Elliptic Functions, as well as the table of Bessel's Functions, published in the *Abhandlungen* of the Berlin Academy, stand as examples of his work.

MR. H. H. HAYTER, C.M.G., the well-known statist, died at Melbourne last week. He was the first president of the economic and social science section of the Australasian Association for the Advancement of Science. His numerous and valuable statistical publications earned for him the honorary membership of statistical societies in various parts of the world.

DR. CANINI, of Leghorn, a well-known Italian specialist in diseases of children, who died recently, has, says the *British Medical Journal*, bequeathed his entire estate, amounting to 2,300,000 lire (£92,000) for the foundation of a hospital in which poor children suffering from diphtheria may have the advantages of the serum treatment gratuitously.

WE take the following news from the same source:—The late Dr. Alfred L. Loomis, of New York, has left real estate to the value of 400,000 dollars (£80,000), and personal property amounting to 600,000 dollars (£120,000). The income of 25,000 dollars (£5000) is given to the Loomis Laboratory, and whatever part of the income is not used is to be paid to the Professor of Pathology of the University of New York. A sum of 10,000 dollars (£2000) is bequeathed to the New York Academy of Medicine, the bequest to be known as the Loomis Entertainment Fund, and the interest to be used in providing entertainment for the Fellows of the Academy.

M. NILS EIKHOLM, who was at the head of the Swedish astronomical and meteorological expedition for observing the transit of Venus in 1882, has accepted a place in the Andrée balloon, which is to start from Spitzbergen for the North Pole in July 1896. The ascent is to take place from Norskoarna, the distance from which to the North Pole is about 600 miles. But it is not expected that the balloon will travel in a direct line. M. Andrée will visit France in July next, and he will probably be present at the Ipswich meeting of the British Association.

DR. M. A. VEEDER writes: "In the table of 'Days with maximum temperature not over 32° at Greenwich,' on page 174 of NATURE (February 28), the curve rises sharply and decidedly at intervals of exactly twelve years—namely, in 1854, 1866, 1878, and 1890. These years also fell in the well-known period of sun-spot and auroral minimum, but did not comprise the entire periods of such minimum in each case. There seems to be a clue here that is important, and that is in a line with the study of current phenomena of this sort in which I have been engaged, some of the results of which were presented in a paper entitled 'Periodic and Non-Periodic Fluctuation in the Latitude of Storm Tracks,' read at the Chicago Congress of Meteorology in 1893."

THE following are among the lecture arrangements at the Royal Institution, after Easter:—Prof. George Forbes, three lectures on "Alternating and Interrupted Electric Currents"; Prof. E. Ray Lankester, four lectures on "Thirty Years' Progress in Biological Science"; Prof. Dewar, four lectures on "The Liquefaction of Gases"; Dr. William Huggins, three lectures on "The Instruments and Methods of Spectroscopic Astronomy" (the Tyndall Lectures); Mr. Arnold Dolmetsch, three lectures on "Music and Musical Instruments of the Sixteenth, Seventeenth, and Eighteenth Centuries: 1. English; 2. French; 3. Italian" (with illustrations upon original instruments). The Friday evening meetings will be resumed on April 26, when a discourse will be given by Dr. John Hopkinson, on "The Effects of Electric Currents in Iron on its Magnetisation." Succeeding discourses will probably be given by the Earl of Rosse, Veterinary-Captain Frederick Smith, the Hon. G. N. Curzon, M.P., Mr J. Viriamu Jones, Prof. Alfred Cornu, and other gentlemen.

A STRONG earthquake shock was felt at 1.16 p.m. on Saturday last at Comacchio, in the province of Ferrara, Italy. Several houses and a church were slightly damaged. At Mirabella Imbaccari, in the province of Catania, in Sicily, the earthquake caused the collapse of a building.

DR. B. BRAUNER, Professor of Chemistry in the Bohemian University, Prague, suggests to us that argon possibly exists in nebulæ. He points out that a strong argon line, measured by Mr. Crookes, has practically the same wave-length as the chief nebula line, and thinks that the line at λ 3729·8 in the "blue" spectrum of the new substance represents the line at λ 3730, found in the spectra of nebulæ and white stars.

HERR W. SIEBE has started on a botanical exploration of Asia Minor, with the special object of making collections of the almost unknown flora of Cilicia Trachea. Setting out from Cyprus, he proposes to visit Mersina in southern Asia Minor, proceeding then to the Kalykadnos Valley and the adjacent mountains, the steppe-district of Konia, the maritime district of Egerdir, and finally, in the summer, the elevated alpine region of Geigdagh.

A STORM of unusual severity passed over these islands on Sunday last. At 8h. a.m. on that day it was central over the south of Ireland, and by 6h. p.m. of the same day the centre had reached Denmark, having traversed a distance of 600 miles in ten hours, which gives an average rate of progress of sixty miles an hour. Much damage was done to life and property over the whole country; but its greatest violence was felt over the southern and midland counties. The maximum force at Greenwich was at 2h. 20m p.m., when the anemometer registered a pressure of 36 lbs. on the square foot, which is equivalent to an hourly velocity of eighty-five miles. Thunder and lightning occurred at several places in the rear of the disturbance.

THE project of a great free public library in New York City has just taken shape, and been adopted by the several persons and boards of trustees interested. It contemplates the union of the Astor, Lenox, and Tilden funds, aggregating 8,000,000 dollars. The site of the library is not yet determined, owing to some restrictions on the use of the block facing Central Park, on which the Lenox Library now stands. This site is preferred if available. Boston, with its 5,000,000 dollars free library, just completed, has already taken the lead. Brooklyn has in the library of the Pratt Institute the nucleus of an admirable free library, for which a new building is nearly ready.

WE are glad to learn of the continued growth and development of the Brooklyn Institute, due in great measure to the stimulus imparted by the Brooklyn meeting of the American Association for the Advancement of Science last summer. Since that time the membership of the Institute has increased many hundreds, bringing it up to very near four thousand, and making it one of the largest scientific associations in the world. Plans for a new building and museum, to cost several million dollars, have been for some time ready, and only await funds. Probably work will begin during the present season. The site is secured, and it is hoped that aid from the city will be obtained as soon as the condition of finances justify it. Meanwhile the Institute, in its geographical section, is foremost in promoting far-reaching plans of exploration toward both poles. Besides the arctic expedition mentioned in NATURE last week (p. 488), a well-digested plan for antarctic exploration has been presented by Dr. Fred. A. Cook, who is already familiar with travel in the north. He proposes to start next September, equipped for a stay of three years, but with the intention of returning in two years unless accidentally detained. It seems probable that the expense of the expedition will be provided for, and that it will be the best equipped that has ever ventured into that region.

IN the February and March numbers of the *Geological Magazine*, Miss Agnes Crane gives an account of the results of recent research on the geological distribution of the Brachiopoda, and their bearing on the evolution of the group. The simple *Paterina* of the Cambrian is regarded as the actual root-stock of the group, and the descent of the chief lines is traced from it, with some breaks here and there from imperfection of knowledge. According to Beecher, almost all Brachiopoda pass through a "paterine" stage of development. *Lingula*, which (in the proper generic sense) does not occur below the Ordovician, passes in its development through a stage in which it resembles its predecessor *Obelella* of the Cambrian, and the latter is said to have a transient "paterine" stage. *Terebratulina* is also stated to pass through a "linguloid" stage, yet its branch is not regarded as derived from *Lingula*, but independently from *Paterina*. Numerous other genera are dealt with, and the paper is illustrated by two plates, one giving the genealogical tree of the Brachiopoda, and the other some examples of the relation of forms.

THERE is an interesting note in the *Bulletin* of the Royal Gardens, Kew, on the use of green glass in plant-houses. The use of glass of a green tint has been for half a century a characteristic peculiarity of the plant-houses at Kew, having been adopted in 1845-46 on the recommendation of Mr. Robert Hunt, F.R.S., on the ground that while admitting light and chemical power in the same proportions as white glass, it would obstruct the passage of those rays which produce scorching. Recent investigations have, however, shown that the green glass used at Kew intercepts about one-half of the effective influence of ordinary sunlight on the processes of plant-life. Of late years the increasing haziness of the sky, due to the smoke produced by the rapid extension of London to the south-west, has produced the same effect at Kew as the use of green glass; and it has become obvious that in the future the plant-houses must be so constructed as to exclude as little of the available sunlight as possible. Since 1886 the use of green glass has, therefore, been discontinued in all the houses except the fern-houses and the palm-house; and, it having been proved by experiment that even filmy ferns thrive better under white than under green light, if direct exposure to the sun is excluded, the use of green glass will now be altogether abandoned at Kew.

THE action of light in producing an electric discharge through a vacuum tube has been further investigated by Messrs. Elster and Geitel, who communicated some very suggestive results to the Berlin Academy at a recent sitting. They used a "photo-electric cell," consisting of an exhausted glass globe with an anode of platinum wire and a kathode of an alloy of sodium and potassium in equivalent proportions, which is liquid at ordinary temperatures. This alloy was illuminated by a beam of white light from a piece of zircon rendered incandescent by an oxy-coal gas blow-pipe flame. This was condensed and made parallel, and then sent through a Nicol prism so as to polarise it in a certain plane. It was then found that a current passed through the cell on connecting its terminals with a battery giving some 400 volts. The strength of this current depended very much upon the angle of incidence and upon the plane of polarisation. It was greatest when the plane of polarisation was perpendicular to the plane of incidence, *i.e.* when the electric displacements constituting light took place in the plane of incidence, and when the angle of incidence was about 60°, *i.e.* the polarising angle of the alloy itself. The phenomena have probably some connection with the fact discovered by Quincke, that light polarised normally to the plane of incidence penetrates furthest into metallic sheets.

OF late years the transmission of electricity through gases has been attracting a considerable amount of attention, and numerous papers have appeared dealing with this subject, one of the last being by G. Vincentini and M. Cinelli. Their paper, which appears in the *Nuovo Cimento* (3) vol. xxxvi., deals with the transmission of electricity through the gas surrounding a wire heated to redness by an electric current. The authors first describe experiments they have made on a long platinum wire surrounded either by air or carbon dioxide. The wire was protected from draughts by a series of screens, and a movable platinum electrode, connected to a quadrant electrometer, gave the potential of the air at different distances above and below the heated wire. It was found that the potential assumed by the electrode connected to the electrometer was higher than the mean potential of the heated wire. When the current passed through the wire was sufficiently intense to heat it to incandescence, the potential of the insulated electrode when placed above the wire did not vary with the distance from the hot wire to any sensible extent, only the maximum electrification was attained at different times after starting the current, and the greater the distance from the hot wire the greater the time which elapsed before the steady state was reached. When, however, the insulated electrode is below the incandescent wire, the difference of potential decreases very rapidly with the distance, so that at 15 m.m. it almost vanishes. In order to carry on observations on other gases besides air and carbon dioxide, the authors have devised a modified form of apparatus in which the incandescent wire is placed inside a globe which is silvered on the inside. This globe has four tubuli, two of which serve for the introduction of the electrodes for the hot wire; while of the remaining two, one admits the insulated electrode, and the other a wire which is connected to the silver coating of the globe, and serves to put this to earth. The authors consider that their experiments show that the gaseous molecules which leave the surface of the incandescent platinum wire in the case of hydrogen are positively electrified, their potential being about 0·25 volt higher than the mean potential of the incandescent wire. In the case of air and carbon dioxide the increase above the mean potential of the wire is about one volt. With hydrogen at a somewhat high temperature an inversion of the phenomenon takes place, since the potential of the insulated electrode becomes less than the mean potential of the wire.

A NEW phototheodolite is described by Herr O. Ney in the *Zeitschrift für Instrumentekunnde*. The novel feature about it is the geometrical clamp, which enables the surveyor to exchange the telescope and the camera on the stand with ease and accuracy. Both are provided with three spherical feet, which rest in a hole, a slot, and a plane respectively, made of hard steel, and fixed on the stand. This seems an admirable way out of the difficulty attending the simultaneous use of telescope and camera. Other instrument-makers combine the two by mounting a telescope at the side of the camera, with a counterpoise on the other side. In one instrument the telescope lens is also used for photographic purposes. But these instruments are either too small, or the adjustment is exceedingly unstable. In Ney's phototheodolite, which is made chiefly of aluminium, provision is made for securing the camera or the telescope on the stand after it is mounted in the hole-slot-and-plane clamp, and also for the constancy of the position of the sensitive plate. With these improvements, the instrument is likely to become a most valuable aid to surveying practice.

DR. C. G. DE DALLA TORRE'S useful "Catalogus Hymenopterorum" continues to make satisfactory progress. It is proposed to complete it in ten octavo volumes, exclusive of bibliography and index, which will form a separate volume; and five volumes have already been published, including vol. 1, *Tenthredinidæ* and *Uroceridæ;* vol. 2, *Cynipidæ;* vol. 6, *Chrysididæ;* vol. 7, *Formicidæ;* and vol. 9, *Vespidæ*. The remaining families may be expected to follow shortly. The subject of entomology is so vast that little progress can be made without some entomologist from time to time devoting his life to the compilation of these great key-catalogues, which are landmarks in the study of the orders of which they treat, and stand towards them in the same relation as a dictionary to a language. Moreover, such catalogues involve an amount of patient and unremitting toil that no one can appreciate who has not himself experienced it; they are frequently published at a heavy pecuniary loss, and are peculiarly liable to criticism, which may be fair and friendly in tone, or may be just the reverse. Let us hope that Dr. Dalla Torre's labours will meet with the encouragement which he deserves from the hymenopterists, whose labours he has so much contributed to lighten.

THE discovery of the use of fire dates back to the very dawn of human intelligence; therefore the study of the rites and ceremonials which are found among every race in connection with the lighting of new fires, furnishes important facts for the discussion of the primitive history of human culture. But before it is possible to apply comparative methods of treatment to the subject, exact observations are required of the details of the new fire ceremony, wherever it survives, especially in less modified, savage, or primitive peoples. This requirement is fulfilled by an article, by Mr. J. W. Fewkes, descriptive of the new fire ceremony as it exists among the Pueblo Indians of Tusayan (*Boston Soc. Nat. Hist.*, vol. xxvi. pp. 422–458, Feb. 1895). Mr. Fewkes watched two such observances of the Tusayan Indians, one in 1892, and the other in 1893. In both years active ceremonials began on November 13, and continued five days. Two other days, November 8 and 9, were devoted respectively to "smoke assembly" and "official announcement," and November 18, when all serious ceremonials had ceased, was a general holiday. On each of the five days, from November 13–17, various processions and rituals were observed, in many of which the element of phallic worship plays a not inconspicuous part. It is unnecessary to describe these performances, but one or two remarkable points in connection with the dates on which they take place, are of interest. The Tusayan Indians, says Mr. Fewkes, can neither read nor write, and are ignorant of our almanacs and calendars, nevertheless they manage to make the performances commence on the same date, within a day or two, every year, the time of year being obtained by observation of the stars. Another instance of the astronomical knowledge of such rude people as the Tusayan Indians, is afforded by the fact that the culmination of the Pleiades is used to determine the proper time for the beginning of certain rites. This is a further example of the widespread use of the Pleiades for the determination of the time for the celebration of primitive rites and ceremonials.

IT may interest our readers to know that a catalogue of the more important books published in Denmark and Norway during the year 1894 can be obtained from the Skandinavisk Antiquariat, 49 Gothersgade, Copenhagen. The catalogue contains the titles of a number of important works on various branches of science.

A NEW volume, containing the Biological Lectures delivered at the Marine Biological Laboratory, Woods Holl, in 1894, will shortly be published by Messrs. Ginn and Co. The lectures cover a wide range of subjects, most of which are prominent questions at the present time, and all of which are of special interest to teachers and students of biology.

MR. R. F. STUPART, the new Director of the Meteorological Service of Canada, has commenced the publication of a monthly weather map, showing the mean temperature and the difference from the mean average temperature, also total rain and snowfall for the month, and depth of snow on the ground on the last day of the month. It is interesting to note that an extremely cold spell prevailed over Ontario in the early part of February, some of the low readings being almost unprecedented.

MR. H. W. WILEY, the chemist to the United States Department of Agriculture, recommends the cultivation of the cassava, *Manihot utilissima*, in the most southerly of the United States. It furnishes an excellent food for men and for cattle; though, from the small proportion of nitrogen which it contains, it cannot take the place of bread-stuffs. A very good kind of tapioca may be made from it. The yield, in sandy soils, is from four to five tons per acre.

A COLOURED map, showing the density of the population of Ireland at the Census of 1891, has been prepared and published by Mr. E. E. Fournier, Bray, Ireland. The map exhibits at a glance the density of the population, and shows clearly that some of the oldest railways have had a beneficial influence in preserving or increasing the population of the districts through which they run. It is the first of a series intended to exhibit graphically the physical, social, economic, and religious features of Ireland.

"THE Statesman's Year-Book" (Macmillan and Co.)—that handy compendium of statistical and historical information relating to all the States of the world—has attained its thirty-second year of publication. Edited by Mr. J. Scott Keltie, with the assistance of Mr. I. P. A. Renwick, the volume is a standard work of reference in which the man of business can find the commercial statistics he needs, to which the politician can apply for trustworthy statements, and from which the student of geography can obtain the latest geographical information.

DR. A. B. MEYER, of the Royal Zoological Museum at Dresden, has sent us a description of two new birds of paradise from New Guinea. (*Abh. u. Ber. d. K. Zool. u. Anthr.-Ethn. Mus. zu Dresden*, 1894–95, No. 5). One of the birds, shown in its natural size in one of the two coloured plates which illustrate the paper, possesses remarkable characteristics in the form and colour of its plumage, and in the arrangement of two very long feathers which stretch out from the head to about twice the length of the body of the bird. This bird has been named *Pteridophora alberti*, in honour of King Albert of Saxony, and the second one described and figured by Dr. Meyer has been called *Parotia carolæ*, after Queen Caroline.

THE seventh volume of the *Proceedings* of the Royal Society of Victoria has reached us. The volume contains twenty-eight papers, many of them illustrated with plates, communicated to the Society during 1894. With two or three exceptions, the papers belong to the domain of natural science. Among the contributions we notice one on Tasmanian earthworms, by Prof. Baldwin Spencer, and a note, by the same author, on two new forms of marsupials obtained in Central Australia, during the visit of the Horn Scientific Expedition to the Macdonnell Ranges. The geology of Castlemaine is described by Mr. T. S. Hall, and geological notes on the country between Strahan and Lake St. Clair, Tasmania, are contributed by Messrs. Graham Officer, L. Balfour, and E. G. Hogg. The older tertiary rocks of Maude, and the palæontology of the older tertiary of Victoria, form the subjects of two separate papers, and a catalogue of non-calcareous sponges collected in the neighbourhood of Port Phillip Heads is given by Prof. A. Dendy. Mention must also be made of a paper, by Mr. R. H. Mathews, on rock paintings and carvings figured by the Aborigines of New South Wales, in caves and rock shelters; and also of one in which Mr. E. F. J. Love gives the results of observations with Kater's invariable pendulum, made at Sydney. The object of this investigation was to throw some additional light on the question of the difference between the values of *g* at Melbourne and Sydney. A comparison of the results obtained by the United States Coast Survey officers at Sydney in 1883, with those found by Mr. Baracchi at Melbourne in 1893, has shown that a pendulum beating seconds approximately should lose 8·58 vibrations per day, if transferred from Melbourne to Sydney. Lieut. Elblein found, however, by swinging three of von Sterneck's pendulums at the two places, that the loss was 13·48 vibrations per day. Mr. Love comes to the conclusion that the difference between the vibration numbers at Melbourne and Sydney is 12·2 per day.

THE additions to the Zoological Society's Gardens during the past week include a Sand Badger (*Meles aukuma*) from Japan, presented by Mr. Frederick Ringer; two Polar Bears (*Ursus maritanus*, ♂ ♀) from the Arctic Regions, presented by Mr. John J. Hughes; a Spotted Hyæna (*Hyæna crocuta*, jv.), a Vociferous Sea Eagle (*Haliaetus vocifer*), a Black Kite (*Milvus migrans*), from East Africa, presented by Mr. T. E. C. Remington; a Black-backed Piping Crow (*Gymnorhina tibicien*) from Australia, presented by Mr. J. D. Haggard; a Raven (*Corvus corax*) British, presented by Mr. W. Hillary; a Puff Adder (*Vipera arietans*) from East Africa, presented by Dr. A. Donaldson Smith; a Chimpanzee (*Anthropopithecus troglodytes*, ♀) from West Africa, a Common Marmoset (*Hapale jacchus*) from South-east Brazil, deposited; a Purple-breasted Lory (*Eos riceniatæ*) from Moluccas, a Blue-faced Honey-eater (*Entomyza cyanotis*) from Australia, purchased.

OUR ASTRONOMICAL COLUMN.

THE MOON AND ATMOSPHERIC WAVES.—Lunar atmospheric waves, or air-tides, as they might be called, can, according to M. Bouquet de la Grye, be distinctly traced in the records of barometric pressure collected at insular stations or stations situated close to the sea, where there are no powerful local disturbances to obscure them. In a contribution to the *Annuaire du Bureau des Longitudes*, he reproduces curves of atmospheric pressure traced at Brest, St. Helena, Cape Horn, Batavia, and Singapore, which distinctly show a regular ebb and flow twice a day in accordance with the position of the moon. The amplitude depends upon the declination of the moon and upon its distance from the earth, and also upon the latitude of the place of observation. The maximum amplitude at Brest is about a quarter of an inch of water, which means a fiftieth of an inch of mercury, a small oscillation indeed, but one which is well within our limits of accurate measurement. At Batavia the maximum heights are half an hour after the passage of the moon through the upper or lower meridian. But the retardation is almost imperceptible in other places. This is probably due to the extreme mobility of the upper strata of the atmosphere, and contrasts with the great retardation experienced by the ocean tides. M. Bouquet de la Grye points out the striking analogy between the ocean tide, with an amplitude of 1 m. under the equator, in an ocean having a mean depth of 5000 m., and the atmospheric tide of 2 mm. of water in a sea of air the weight of which represents 10,000 mm. of water.

STELLAR PHOTOGRAPHY.—A remarkable illustration of the value of photography in astronomical researches is afforded by a recent comparison of one of Dr. Max Wolf's well-known photographs with the same part of the sky as seen with the 36-inch refractor of the Lick Observatory. Prof. Schaeberle finds that an enlarged photograph of the region about Algol, taken with an exposure of five hours, certainly shows stars down to mag. 16·5, assuming that stars of the 17th mag. are at the limit of vision of the telescope. Making due allowance for the loss of detail in the process of enlarging, "it appears probable that practically every isolated star visible at Mount Hamilton can be photographed by Dr. Wolf, at or near sea-level, with his comparatively small telescope." (*Astronomical Journal*, No. 338). The telescope employed by Dr. Wolf has a Voigtlander lens of six inches aperture.

STANDARD TIME IN AUSTRALIA.—The resolution as regards Australian standard time, adopted at Melbourne last October (see p. 278), has come into effect. Queensland, New South Wales, Victoria, and Tasmania are now all using the time of the meridian 150° E., that is, ten hours before Greenwich. Queensland was the first of the Australian colonies to take action, and there the new time came into force on the first day of this year. Mr. H. C. Russell, of Sydney Observatory, has sent us a copy of the Act which established the mean time of the meridian 150° E. of Greenwich as the standard time in New South Wales, on and after February 1. He says that "South Australia has adopted the time of the ninth hour before Greenwich."

NOVA AURIGÆ.—Notwithstanding the enormous velocities in the line-of-sight recorded by the spectroscope, Nova Aurigæ has given no signs of proper motion, such as can be perceived with the telescope and micrometer. Such, at least, is the result of a comparison of the measurements made in 1894 by Prof. Barnard with those made by the same observer in 1893, and by Mr. Burnham in 1892. (*Ast. Nach.* No. 3279.) The magnitude also remains pretty constant, being 10·5, on the scale adopted at the Lick Observatory. The Nova seems to be too far removed from our system to give any appreciable parallax.

NEW COMPOUNDS OF HYDRAZINE WITH FATTY ACIDS.

COMPOUNDS of several of the more important organic fatty acids with hydrazine, analogous to the aromatic hydrazides previously prepared, have been obtained by Prof. Curtius and his pupils Messrs. Schöfer and Schwan, and an account of them is published in the current issue of the *Journal für Praktische Chemie*. The hydrazides of the monobasic fatty